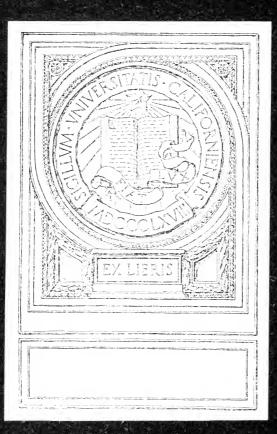
5B 117 W5



SCLE LIMITOR OF LEET, THE CHILD LIMITSHAY OF THE CHILD OF THE

by '. ... Whe ler and d. C. Edler L... No. 775

YD 14752



limiv or California

## SOME EFFECTS OF THE WAR UPON THE SEED INDUSTRY OF THE UNITED STATES

ΒY

W. A. WHEELER Specialist in Seed Marketing

AND

G. C. EDLER Investigator in Seed Marketing Bureau of Markets

### CONTENTS

						rage
More Seeds Will be Home Grown						3
Effect of the War Upon Imports and Exports						3
Domestic Demands for Seed						5
Influence of War on Seed Production						7
Seed Stocks						16
Effect of the War on Prices						17
Movement of Seeds						19
Local Problems of Wholesale and Retail Seeds	me	n				19
The Seed Reporting Service of the Rureau of M	ar	ket	9			20



Separate from Yearbook of the Department of Agriculture, 1918

No. 775

# GO VINU AMAGRIJAS

V9/22

SEIIF

Agric. - Forestry Main Library



# SOME EFFECTS OF THE WAR UPON THE SEED INDUSTRY OF THE UNITED STATES.

By W. A. Wheeler, Specialist in Seed Marketing, and G. C. Edler, Investigator in Seed Marketing, Bureau of Markets.

### MORE SEEDS WILL BE HOME GROWN.

ONE of the basic agricultural industries that have undergone many changes, influenced by the war, is the seed industry in the United States. Doubtless some of these changed conditions will become perinanent features of the industry, with the result that this country will tend to become more independent of the world's supply of seeds. It is perhaps true that in the production of certain kinds of vegetable seeds the United States has not reached the same degree of perfection that some other countries have reached after many years and generations of specialized effort; yet, at the same time, few, if any, countries have ever made the rapid strides in vegetable-seed production that this country did during the war.

Many of the effects that have been noted may or may not be permanent. It is too soon after the close of the war to prognosticate their permanency, but their future is worthy of careful study at this time. Often it is difficult to differentiate between those effects that are traceable directly to the war and those that are an indirect result of the war, but some of those that have been noted are discussed rather briefly in this article.

### EFFECT OF THE WAR UPON IMPORTS AND EXPORTS.

In Table 1 are given figures compiled from data obtained from the Bureau of Foreign and Domestic Commerce, of the Department of Commerce, showing the imports of the United States during the first year after our entry into the war, and our average annual imports during the three-year war period ending June 30, 1917, as compared with the average annual imports before the war for a five-year period ending June 30, 1914. A study of these figures will reveal the fact that of practically all field and vegetable seeds used

103514°---19----1

exclusively for planting purposes the imports before the war exceeded those during the war, and in most cases the difference is considerable. The table was published in the issue of the Seed Reporter for October 5, 1918.

Table 1.—Imports of field, regetable, and flower seeds into the United States.

Kind of seed.	Imports, first year of United States war, year ending, June 30, 1918.	A verage annual im- ports, 3-year war period ending June 30, 1917.	Average annual im- ports, pre- war period ending June 30, 1914.2
	Pounds.	Pounds.	Pounds.
Beet, sugar	1	13, 135, 456	11,616,300
Beet, "all other"	1	753,376	819,715
Cabbage	1	270,470	252,528
Carrot		46,651	149,724
Castor beans 1	1	46,060,550	43, 818, 060
Cauliflower		9,963	8,711
Celery 1		667,695	199,358
Collard	1 .	3,073	667
Corn salad		4,843	7,068
Eggplant		1,057	1,795
Kale		34,965	30, 326
Kohl-rabi	,	12,025	21,409
Mushroom spawn	16,923	79,234	279,064
Mustard 1	13,035,837	12, 174, 056	10,819,715
Parsley 1	66,494	82,283	118, 112
Parsnip	7,065	88,477	89,702
Pepper	21,884	11,729	14,515
Radish	102,735	326, 344	491,097
Spinach	804,789	869,321	1,241,758
Turnip and rutabaga	2, 150, 965	1,664,728	1,735,033
Flower seeds 3	\$126, 422	\$198,512	\$239,371
Alfalfa	87, 244	3,996,613	7,301,712
Alsike clover	3,665,037	2,042,314	6,057,196
Crimson clover	1,601,503	6,765,753	8,537,597
Red clover	861,709	15,968,322	12,328,449
White clover		230,073	1,263,881
Clovers, "all other"	2,062,429	2,654,762	4,801,686
Grasses, "all other"		11,888,185	16,644,424
Hairy (winter) vetch	178,766	265,001	2,948,075
Common (spring) vetch		65,179	753,705
Rape 1	12,673,276	6,663,615	5,668,952
Soy beans 1	31,812,997	4,061,755	1,929,435

<sup>1</sup> Imported both for planting and other purposes.

<sup>&</sup>lt;sup>2</sup> The prewar period from which this average has been computed includes 5 years from June 30, 1909, to June 30, 1914, for the first 21 items covering vegetable and flower seeds, and 3 years from June 30, 1911, to June 30, 1914, for the remaining items covering field seeds, except soy beans, for which the imports only-for the year ending June 30, 1914, of that period are available.

<sup>3</sup> Figures given indicate value in dollars instead of quantity in pounds.

During the war the exports of vegetable seeds and of some field seeds, which in the past have been imported in larger quantities than they have been exported, in the main greatly exceeded the exports before the war, despite the fact that many restrictions had to be placed on seed exports to conserve ocean tonnage, to insure a sufficient supply of seed at home, and to guard against shipments billed to neutral countries but ultimately meant for enemy countries. fortunately, export figures for field and vegetable seeds are not available except somewhat incomplete figures for the fiscal years ending July 1, 1917 and 1918. The exports of vegetable seeds for these two fiscal years compared with the anticipated exports for the fiscal year ending July 1, 1919, as reported to the United States Bureau of Markets, by the largest seed dealers indicate that a marked increase in the exports of vegetable seeds has taken place during the war, even at a time when our own domestic demand was greater than ever before. Table 2 shows where the greatest gains in vegetable seed exports were made.

### DOMESTIC DEMANDS FOR SEED.

The war has had a far-reaching effect upon the domestic demand for vegetable seed and certain kinds of field seed. By means of the publicity given by the various agencies of the Government and by seedsmen and periodicals to war gardens, a greater demand for vegetable seed arose than was ever before experienced. People in cities who had never planted gardens were influenced to "do their bit" toward solving the food problem by making gardens. While it is true that in some localities the sales of seed to market gardeners decreased, this was more than offset by the small sales to the vastly increased number of amateur gardeners.

In order to help feed the allies, the farmers of this country, spurred on by record prices, patriotically responded to the appeal for more food crops by planting greater acreages of wheat, corn, oats, rye, barley, etc., and, while conditions were not always favorable, they succeeded in surpassing the record production of many of these crops. Increased acreage, of course, meant an increased demand for seeds with which to plant these crops, and a higher percentage of the

quantity of seed planted of wheat, corn, oats, and barley was sold commercially in 1918 than in 1917, and probably than in most of the years prior to the war. While it is true that a comparatively small percentage of the seed of grain crops is sold for planting purposes by commercial agencies, nevertheless this small percentage often is of the greatest importance, and the seed dealers were quick to sense the increased demand for seed grains.

◆Table 2.—Vegetable seed exports for the United States.

Item.	Estimated quantity reserved for export dur- ing year ending July 1, 1919.1	Exports for year ending July 1, 1918. <sup>2</sup>	Exports for year ending July 1, 1917. <sup>2</sup>
	Pounds.	Pounds.	Pounds,
Beans, dwarf snap	337,049	199,002	194,959
Beans, garden pole (not in-	, , , , , ,	,	,
cluding lima)	58, 459	26, 552	17,234
Beet, garden	160, 404	42, 293	44, 283
Beet, mangel	31,696	7,355	16,619
Beet, sugar	60, 260	30,346	300
Cabbage	2,468	15,468	17, 237
Carrot	959,314	400,009	159, 270
Cauliflower		516	355
Celery	11,728	3,997	1,927
Cueumber	30,943	38,653	44, 921
Kale		214	277
Lettuce	306,353	270, 426	313,678
Muskmelon	, ,	2,600	3,023
Watermelon.		6, 205	7,499
Onion seed	408,410	242,232	291,783
Onion sets		233, 400	358, 424
70 1		9, 406	5, 258
Parsnip	54,393	16,733	10,422
Peas, garden	4,384,177	2,713,101	7,289,225
Pepper	516	931	851
Pumpkin		2,894	2,487
Radish	346, 527	104,048	59,065
Salsify	0.10, 0.21	18, 124	2,805
Spinach	46,990	9, 216	1,992
Squash, summer		2,789	2,872
O 1		2,759	2,545
Sweet corn	380, 816	409, 225	215, 187
Tomato	10, 443	10,913	5,387
Turnip, English	9,397	92,304	6,841
Turnip, Swede	28, 938	25,990	10,514

<sup>1</sup> Seed Export Survey of Sept. 11, 1918.

<sup>&</sup>lt;sup>2</sup> Seed Survey of July 1, 1918.

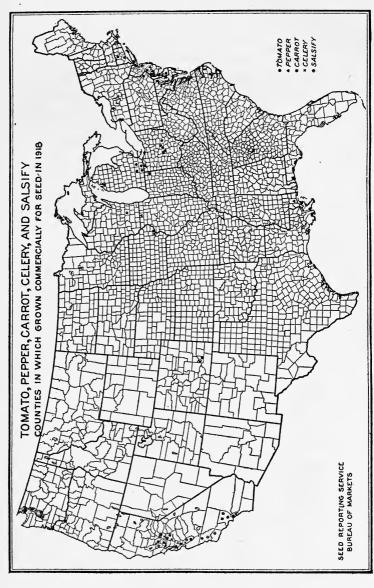
The increased acreage of food crops was generally at the expense of grass or forage crops, a condition similar to that which existed in European countries. The demand for these seeds, therefore, appears with certain exceptions to have been less than usual. The demand for clover seed, sown in many localities more for improving the soil than for the revenue it brings as a hay or seed crop, has been exceedingly good during the war.

### INFLUENCE OF WAR ON SEED PRODUCTION.

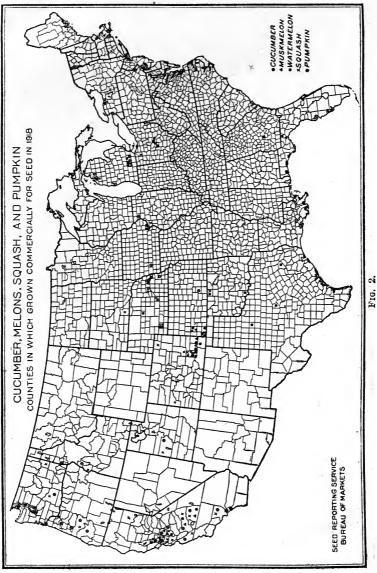
The production of vegetable seed in the United States has been revolutionized by the war. Previously, most of the beet, carrot, radish, and spinach seed planted in this country was imported from Great Britain and France, and to a less extent from other countries. Instead of an importer of these and other seeds, the United States became an exporter, and the gains made in exports have already been shown in Table 2. In 1916, European countries began placing large contracts with commercial seed growers in the United States for the production of many crops which in the past had not been grown here on a commercial scale.

In order to take care of the increasing domestic and foreign demand and the falling off of imports, the acreage planted in old, proven localities was increased and new areas of production were sought, particularly with reference to vegetable seeds, but to a much less degree with reference to field seeds. While some new areas were found to give better yields or seeds of better quality than did old areas, the expense of pioneering was often such a drawback as to discourage further increased production in many of the new areas. However, it is apparent to many growers that certain kinds of seed may be produced in a number of places in this country, and that one of the best assurances against total failure of seed crops is the diversification of acreages as much as possible. At the same time it is realized that certain localities are better adapted for the production of a few kinds of seed than are other localities.

Figures 1 to 6 show the location of the counties in the United States in which many of the most important vegetable seeds are grown. Table 3 shows the commercial



2 3 6 6 6 7



103514°--19---2

Fig. 3.

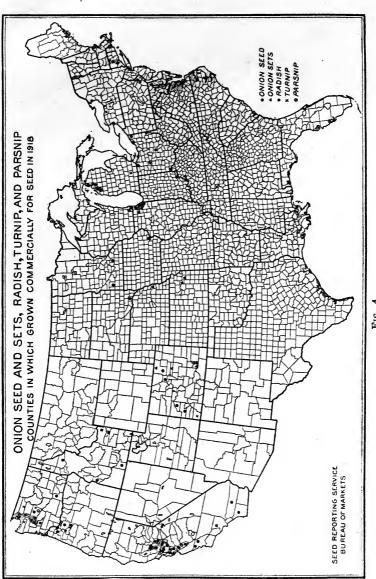
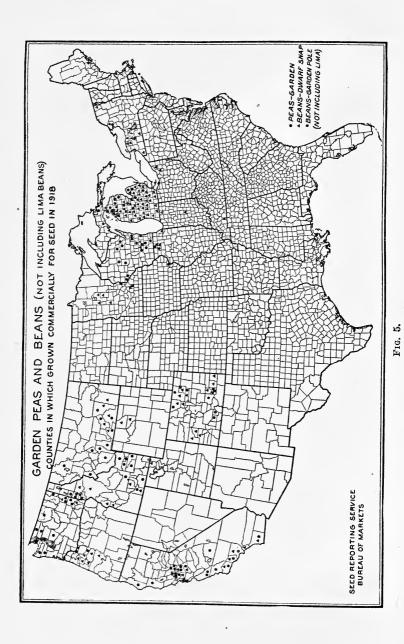
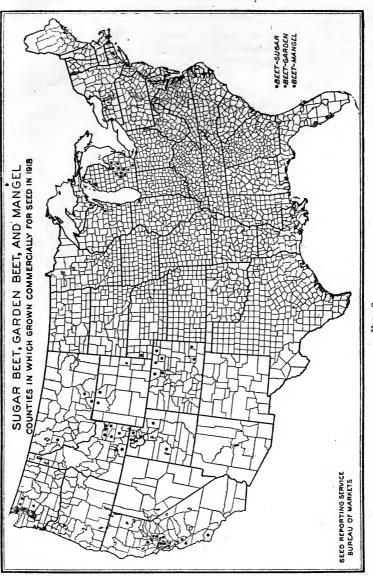


FIG. 4.





### Effects of the War Upon the Seed Industry.



F1G. 6.

acreage, average yield per acre, commercial production and consumption of vegetable seed crops in 1918, 1917, and 1916, as reported to the Bureau of Markets in a survey made July 1, 1918.

Table 3.—Commercial acreage, average yield per acre, commercial production, and estimated commercial consumption of vegetable seed for the United States.

[A revised tabulation of reports from 185 commercial vegetable-seed growers reporting in the vegetable-seed production survey of July 1, 1918, including information and estimates from other sources.]

	Com	nercial acr	eage.	Average yield per act			
Kind of seed.	1918	1917	1916	1918 esti- mated.	1917	1916	
	A cres.	A cres.	A cres.	Pounds.	Pounds.	Pounds.	
Beans, dwarf snap	70,868	63,524	63, 581	514	234	237	
Beans, garden pole (not in-		ĺ					
cluding lima)	6,297	4,029	4,971	627	315	243	
Beet, garden	2,748	826	342	889	562	587	
Beet, mangel	418	20	5	873	1,504	720	
Beet, sugar	6,014	4,638	5,655	980	1,094	980	
Cabbage	974	737	765	161	393	284	
Carrot	4,622	1,965	1,039	508	574	574	
Celery	175	84	85	370	335	61:	
Cucumber	3,053	4,694	4,397	210	218	209	
Kale	71	18	55	153	250	54	
Lettuce	2,276	1,979	1,723	320	457	626	
Muskmelon	1,558	1,827	1,791	148	161	15	
Watermelon	10,522	8,929	6,249	105	71	7.	
Onion seed	7,233	3,782	3, 181	205	259	41	
Onion sets	3,470	2,637	2,478	11,380	11,851	9, 18	
Parsley	155	109	78	360	772	1,58	
Parsnip	269	137	90	743	499	74	
Peas, garden	110, 194	110, 129	72, 130	598	444	72	
Pepper	715	686	432	100	31	3	
Pumpkin	1,490	1,512	1,201	151	72	9	
Radish	8,646	3,521	2,631	225	176	27	
Salsify	123	131	52	228	431	62	
Spinach	3,942	1,415	123	395	220	36	
Squash, summer	916	836	1,068	158	145	15	
Squash, winter	2,539	1,328	1,131	102	70	7	
Sweet corn	13,934	12,975	14,420	1,180	640	588	
Tomato	4,024	3,204	2,460	71	92	70	
Turnip, English	766	24	54	290	127	37	
Turnip, Swede	271	21	10	80	418	38-	

Table 3.—Commercial acreage, average yield per acre, commercial production, and estimated commercial consumption of vegetable seed for the United States—Continued.

Kind of seed.	Com	nercial produ	Estimated commercial consumption, year ending July 1.		
Killa di Seca.	1918 esti- mate.	1917	1916	1918	1917
	Pounds.	Pounds.	Pounds.	Pounds.	Pounds.
Beans, dwarf snap	36, 425, 000	14,809,000	15,074,000	13,700,000	15, 550, 000
Beans, garden pole (not in-					
cluding lima)	3,950,000	1, 268, 000	1,208,000	1,790,000	1,630,000
Beet, garden	2,440,000	464,000	200,000	480,000	480,000
Beet, mangel	365,000	30,000	3,600	320,000	320,000
Beet, sugar	5,900,000	5,076,000	5, 539, 000	13,800,000	11, 200, 000
Cabbage	157,000	292,000	217,000	485,000	500,000
Carrot	2,350,000	1,129,000	534,000	455,000	405,000
Celery	65,000	28, 100	5, 200		
Cucumber	640,000	1,026,000	920,000	830,000	525,00
Kale	10,900	4,500	29,000	48,000	64,000
Lettuce	730,000	903,000	1,078,000	470,000	585,000
Muskmelon	230,000	293,000	277,000	300,000	220,00
Watermelon	1,100,000	633,000	470,000	505,000	485,00
Onion seed	1,480,000	980,000	1,329,000	1,030,000	1, 165, 00
Onion sets	39, 500, 000	31, 249, 000	22,756,000	30,950,000	22,300,00
Parsley	56,000	84,000	123,000	144,000	125,00
Parsnip	200,000	68,000	67,000	120,000	155,00
Peas, garden	65, 912, 000	48,868,000	52,014,000	50,300,000	53, 400, 00
Pepper	71,500	21,000	17,000	33,000	31,00
Pumpkin	225,000	108,000	111,000		87,00
Radish	1,940,000	621,900	720,000	855,000	935,00
Salsify	28,000	56,000	32,000	25,000	21,00
Spinach	1,560,000	300,000	45,000	785,000	930,00
Squash, summer	145,000	121,000	164,000	101,000	105,00
Squash, winter	260,000	93,000	87,000	102,000	114,00
Sweet corn	16,500,000	8,303,000	8, 468, 000	8,900,000	7,460,000
Tomato	287,000	227,000	187,000	206,000	234,00
Turnip, English	222,700	3,000	20,000		1,550,00
Turnip, Swede	22,000	8,700	3,800		400,000

It will be noted that a marked increase in acreage is reported for 1918 for garden beet, mangel beet, carrot, onion, radish, spinach, winter squash, English turnip, and Swede turnip seed. Unfortunately, no figures approaching in completeness those given in Table 3 are available for the prewar period, but there is no question that the acreage of the above-mentioned crops, as well as many others, in any one year of the prewar period, was in almost every case

considerably less than even the 1916 acreage of each of these seed crops.

16

While the war stimulated the production of most kinds of vegetable and field seed, it had a deterrent effect upon the production of other kinds commonly exported from this country, such as timothy, redtop, meadow fescue, and Kentucky bluegrass. High hay prices, increased acreages of food crops, and limited demand for seeds of grass crops from European countries, among other factors, resulted in the cutting of a smaller acreage of the grasses for seed purposes during the war. Since the close of the war, however, an increasing demand for grass seeds is apparent because of the approach of more normal conditions in European countries which permit of more diversified farming.

### SEED STOCKS.

Larger stocks of most of the field and vegetable seeds were held by seedsmen during the war than were held before the There were many reasons for this. The demand for them was greater and on account of the uncertainties attendant upon domestic production of kinds that formerly were imported, larger growing contracts were placed with the commercial seed growers, with the result that when larger deliveries were made than were anticipated, larger stocks had to be carried. Furthermore, the ever-increasing high prices for seed, which will be discussed later, also had a tendency to cause the larger seedsmen to buy more than they had been accustomed to do in the past. A larger percentage of the stocks of vegetable seed was grown in the United States during the war than before the war, which meant inferior quality with some kinds and possibly superior quality with other kinds. In the opinion of some seedsmen, quantity rather than quality seed production was so uppermost in the minds of growers that quality was thereby sacrificed. On the other hand, the small country merchant handling field or vegetable seeds in bulk often was loath to buy heavily much in advance of the planting season because of the high prices prevailing on most kinds; hence increased stocks had to be carried by the larger seedsmen during the war.

There was a pronounced tendency on the part of many seedsmen to reduce the number of varieties of vegetable seeds handled by them, to minimize the number of so-called novelties, and to emphasize the standard varieties. This was in keeping with the spirit of conservation that was so much in evidence during the war.

### EFFECT OF THE WAR ON PRICES.

Prices on practically all field and vegetable seed advanced with the increased cost of production and marketing and in sympathy with other agricultural and manufactured commodities. Commercial vegetable-seed growers had to pay the small growers with whom they contracted considerably higher prices, and additional help at roguing and harvest time commanded much higher wages than have ruled in the past. Because food crops were commanding such high prices, small vegetable seed growers preferred to grow them rather than vegetable seeds, and many growers were induced to continue producing vegetable seed only after much higher prices were offered them for doing it.

Thus it was necessary for the commercial growers to ask higher prices on their growing contracts with seedsmen. In turn, seedsmen found that the cost of doing business was greater and the risks assumed more hazardous. All these factors were reflected in the higher prices at which seedsmen catalogued their vegetable seeds for 1918. In Table 4, compiled from a large number of retail mail-order catalogues of representative seedsmen, the prices given represent retail prices of standard varieties of seed for 1918, and for the same varieties in 1917. The increase in prices of 1918 over those of 1917 range from about 5 per cent on celery up to 260 per cent on Swede turnip seed, and average for the items listed about 60 per cent.

Prices on most of the field seeds were considerably higher during the war than prior to it, but it is very difficult to determine how much of the increase was due to the war and how much to unfavorable climatic conditions. High prices for food and hay crops were largely responsible for the reduction in the acreage of grasses and clovers cut for seed purposes, and, with yields per acre equal to or less than the average, the production of these seeds was decreased, a factor which affected prices.

Table 4.—Retail prices of standard varieties of seed, 1917 and 1918.

	19	018	1917		
Crop.	Per ounce.	Per pound.	Per ounce.	Per pound.	
Beet, garden	Cents.	Cents.	Cents.	Cents.	
Beet, mangel	13	132	8	57	
Cabbage	45	505	25	298	
Carrot	22	223	14	142	
Celery	54	635	52	597	
Cueumber	14	177	11	93	
Lettuce	15	141	14	134	
Muskmelon.,	17	152	16	117	
Watermelon	12	97	11	79	
Onion seed	55	516	23	250	
Parsley	13	107	11	88	
Parsnips	18	176	10	68	
Radish	21	167	10	67	
Spinach	19	212	11	89	
Squash, summer	14	138	10	94	
Squash, winter	15	148	12	96	
Tomato	38	411	29	297	
Turnip, English	18	196	10	69	
Turnip, Swede	22	235	9	65	
	Per quart.		Per quart.		
	Cents.		Cents.		
Beans, dwarf snap	79	43	62	32	
Beans, garden pole	76	41	45	26	
Peas, garden	61	37	43	23	
Sweet corn	61	. 38	47	26	

In the case of seed corn in the spring of 1918, most of the price increase should be charged up to a backward growing season in 1917 and early, heavy frost that year. Climatic conditions in 1917 and 1918 also were responsible in considerable measure, together with the small carry-over on July 1, 1917, and still smaller carry-over on July 1, 1918, for the high prices for red-clover seed. The prices of such seeds as timothy, redtop, meadow fescue, and Kentucky bluegrass, a large percentage of the crop of which is normally exported each year, remained nearer prewar levels than did the clovers, seed grains, etc., largely because there appeared to be very little demand in European countries for seeds of the

grasses. In the winter of 1917-18, red-clover seed reached the highest prices on record, but these prices have been exceeded by those prevailing during the fall of 1918 and winter of 1918-19. A comparison of red-clover seed prices on December 1 for "contract, prime grade" on the Toledo market extending over a period of 12 years may be made from the figures given below:

	Price		Price
	per bu.		per bu.
1918	\$25.30	1912	\$11.15
1917	15.90	1911	12.62
1916	10.70	1910	9.00
1915	12.05	1909	8. 77
1914	9. 22	1908	5. 57
1913	8.75	1907	9.95

#### MOVEMENT OF SEEDS.

The transportation situation became so bad during 1917 and 1918 that its effect was very apparent to those wishing to ship seed either by carload or less than carload lots. In some cities, seedsmen pooled with one another their shipments destined for points in the same direction, and closer cooperation in this respect, as well as in others, was more evident than ever before. Embargoes on freight shipments became the rule rather than the exception. The fact that seeds were placed on the preference list did not alleviate conditions much for the seedsmen. Express shipments were made when freight shipments were impossible, but it was not long before express shipments became demoralized. Many seedsmen reported the arrival of seeds from the West too late for planting that season, which was partly responsible for a larger carry-over of some kinds of vegetable seed than usual on the part of many dealers.

# LOCAL PROBLEMS OF WHOLESALE AND RETAIL SEEDSMEN.

In the foregoing, some of the effects upon the seed industry have been pointed out without any specific reference to the changes with which many seedsmen themselves found it necessary to cope. Seedsmen who in the past had relied on the profits derived from exporting or importing seed for the maintenance of their business, soon found that they

could import little or no seed of the kinds handled by them, and were restricted so much in the matter of exports that they had to look for an outlet for their seed in the United States. New areas in this country in which to purchase and also to sell seeds had to be found by many of the seedsmen in order that they might continue in business. Thus they competed with other seedsmen who had been accustomed to buy or sell in these areas.

On account of the uncertainties of distant freight shipments, country merchants were more inclined than usual to place their late spring orders with local or near-by seedsmen. This, of course, affected the business of some of the larger and more distant seedsmen, who formerly sold to these same country merchants.

In order to get business, a few large seed concerns, which formerly were in the habit of attaching sight draft to bill of lading, sold seed on "trade acceptance" terms. Seed shipped by them was paid for by the purchaser with some bankable paper payable in four months or less with interest at about 6 per cent. Though similar arrangements have been made in the past by a few seedsmen, they were little known in the seed trade before the war.

Many dealers reported that it was more difficult to negotiate large loans with the banks because of frequent, temporary depressions. With seed generally higher and money scarcer, field seedsmen often were reluctant to carry as large stocks as customarily. The chances of big profits or losses in the field seed business were greater than in peace times because of the larger and more frequent fluctuations in the prices of seeds.

## THE SEED REPORTING SERVICE OF THE BUREAU OF MARKETS.

In order to act somewhat as a balance wheel to the seed trade and as a guide to the various agencies of the Government in handling the seed end of the food production problem, the Bureau of Markets shortly after war was declared established a Seed Reporting Service. In the matter of seeds, the first great concern of the Nation was to insure, so far as possible, an ample supply of seed of crops that would help feed this country as well as the allies, and to see

that this supply was made available and distributed as economically and efficiently as possible. It is an economic waste of time and resources to produce seed of a kind that is not needed or wanted much in excess of the demand for it.

By means of the figures published in the Seed Reporter, the official organ of the Seed Reporting Service, showing carry-over and current stocks on hand, exports and imports, as well as other information, growers and dealers could determine to some extent, whether or not the growing or handling of various kinds of seeds would result in profit to them.

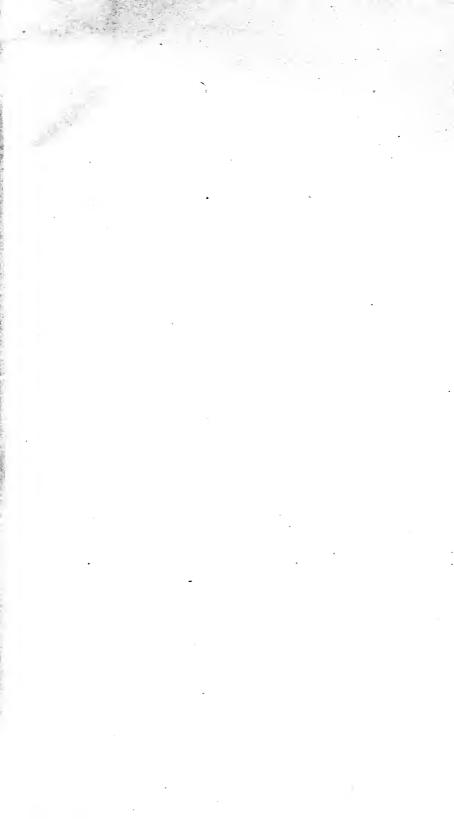
In the case of vegetable seed, the data given served well as an-indicator of which kinds would probably be short for the next planting season unless the acreage devoted to their production was increased considerably or the yield per acre proved to be much above the average. While it is true that some of the larger growers would have gone ahead increasing their own acreage of certain crops two or more fold, many of the growers would have hesitated to place contracts with growers at greatly increased prices, knowing as they did that the labor shortage during the growing season and at harvest time might be even more acute than at planting time, if they had not had access to information which indicated clearly that there would be a good demand for practically all of the seed they could produce of most kinds of vegetable crops.

Published contract prices paid to small growers, and wholesale and retail prices of seedsmen enabled commercial growers to determine whether or not they were paying their growers too much or too little as compared with other commercial growers, whether or not seedsmen were purchasing or selling at prices out of line with analogous prices of other seedsmen, and whether or not the consumers had a right

to object to prices paid by them.

Preliminary estimates of the production of field or vegetable seed, either actual or as compared with normal or with the preceding year, together with figures showing the carry-over and other information, helped to establish more quickly prices of various field seeds; to place buyer and seller on more equal terms so far as knowledge of the supply and demand for particular seeds was concerned; and to assist governmental agencies in formulating a policy with reference to the advisability of allowing the exportation of certain kinds of vegetable or field seeds with or without restriction. The Seed Reporting Service of the Bureau of Markets has been able to supply the information needed to pass upon the necessity of importing certain kinds of seed or of exporting others, or upon the importance of the conservation of certain kinds of seeds and of the urgency for the stimulation of their production. Without such a well-organized agency, the Government would not have been able to pass intelligent judgment upon or to make proper recommendations concerning these questions.

O



### UNIVERSITY OF CALIFORNIA LIBRARY BERKELEY

Return to desk from which borrowed.

This book is DUE on the last date stamped below.

MAY 21 1949 LD 21-100m-9,'48 (B399s16)476 Makers Syracuse, N. V. PAT. JAN. 21 1908

401373

UNIVERSITY OF CALIFORNIA LIBRARY

